

SoS Architecture Models Transformation for Mission Simulation in Aircraft Top-Level Demonstration



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Abstract The continuous modeling is necessary to achieve the virtual verification and validation in aircraft top-level demonstration. To fill in the gaps between SoS architecture models and mission simulation models, a model transforming method for mission simulation is proposed. The operational/ system activity sequences models can be mapped to the parts of the task flows of scenario script in mission simulation system. The operational/ system state transitions models can be transformed to the behavior models though format conversion of the SoS architecture outputs. A sample case is provided to illustrate a specific scenario with architecture models transformation. The result preliminary verifies the consistency of model transformation from SoS architecture to mission simulation.

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